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ILLUSTRATIVE CASES IN ELECTRO-SURGERY.

By W. F. HUTCHINSON, M.D., of Providence, R. I.

BETWEEN a bloodless operation and bloodless operating there is a wide difference—a missing link, and one which to-day remains as much an unsolved problem as the Darwinian ultimatum. It is true that Esmarch, with his elastic bandage, has succeeded in preventing the loss of blood during the comparatively small period of the operation occupied by the passage of the knife through the tissues and the ligation of vessels; but there remains a secondary stage, the major part, so far as time goes, of the whole, wherein capillary hæmorrhage is not controlled at all—that stage usually occupied in allowing the surface to glaze over, preparatory to closing the flaps, supposing an amputation referred to. The long and steady compression to which superficial vessels have been subjected seems to destroy their power of contractility, and they remain patulous and oozing for some time; so that, as I have lately been informed by a prominent surgeon, there is, upon the average, and counting all steps of the operation, as much loss of blood as when only the ordinary tourniquet is employed. This is certainly bloodless operating, but by no means a bloodless operation, the latter term belonging only to electro-surgery. Here, in no step, nor in any stage of any operation, is there necessity for the loss of one drop of blood, nor for any of the prostration dependent upon such drain. It is my purpose, in the following record of cases, to cite one which will fully illustrate the value of galvano-surgery, where a bloodless operation is imperatively called for. Aside from the absence of depletion, there is another advantage in electrical operating—that of avoidance of nerve shock. Whether the current used compensates for the vital force expended in meeting the shock, whether a certain portion of it prevents any loss of nervous force by its inherent similitude and rapid transference thereto, or however else it acts, the fact remains—that there is actually no nerve-shock, no systemic prostration, after even major operations conducted in this way. It is difficult to over-estimate the immense advantage which these two points give to electro-surgery over general surgery, and there can be no doubt, all things being equal, which plan would be preferred by the intelligent surgeon. Unfortunately, all things are not equal. The necessary apparatus is cumbersome, excessively liable to get out of order, costly, and requires an adept, or rather two adepts, to handle it. It cannot be readily transported from place to place, and requires an elaborate preparation before it is ready for a large operation, involving a thorough knowledge of electro-physics, as well as of mechanics. Until other instruments are devised besides those now in use, but a few special operations can be performed, and the value of galvano-surgery is, as yet, exceedingly limited in its boundaries. Still, there are certain operations, demanding conservation of blood and nerve power, wherein the new surgical agent very beautifully displays its powers, and makes good its claim to a position in the armamentarium of the modern surgeon. Notably among these, are removals of morbid growths from the larynx, pharynx, vagina and cervix uteri; and there are few, who, having witnessed the ease with which these operations can be done, where no hæmorrhage obstructs a view of the parts as the division of tissue progresses, will be apt to return to the old plan when the new can be made available.

No man living has had greater experience in these operations than Prof. Byrne, of the Long Island College Hospital, and his testimony is to the same end.

Case I.—About July 1st, of the present year, I was consulted by Dr. A. W. Nelson, of New London, Connecticut, in regard to a case which he represented as fungus hæmatodes of the left breast, in a lady, about seventy years of age, who was still tolerably strong. Dr. Nelson had already removed the growth twice by the ordinary operation, taking care to allow the wound to heal by granulation the second time. Both excisions were followed by rapid growth of the fungus, which assumed its former dimensions in from four to eight weeks, and he was desirous of having it treated with the galvano-cautery. Mrs. P. came to Providence for an examination, and, although opinions differed as to the character of the tumor, there could be no dispute as to the necessity for its immediate removal, as the surface of the mass was becoming putrescent, and septic poisoning was imminent. It was justly considered that her age and the fact that she had lost considerable blood during the last operation precluded another resort to the knife, and it was decided to operate with the battery, all the consulting surgeons assenting.

On the 23d of July, Mrs. P. presented herself, accompanied by her physician, Dr. Nelson, and Surgeon Hasson, U.S.A., of Fort Trumbull. There were also present Drs. Robert Millar, W. H. H. Traner, and my assistant, Dr. Browning. The patient was etherized, and the growth, distinctly pediculated and streaming with fœtid pus, was looped with No. 26 platinum wire, attached to Middledorpf's galvano-ecraseur. Sufficient battery power was turned on to heat the loop to a dull redness, it was slowly tightened, and, in ten minutes, the mass was removed, without the loss of one drop of blood. It weighed one pound and a quarter. Afterward, the base, which looked like the greyish eschar formed by nitric acid, was thoroughly electrolyzed with a 32-cell battery and needles, enough tissue being removed to insure a healthy border to the wound, the second stage of the operation lasting eighteen minutes. Patient recovered well from the anæsthetic, and complained of neither pain nor distress, evincing lively satisfaction in knowing that the growth was removed.

She walked to her carriage, and to her chamber, on the second floor, upon arriving at her boarding-house. There was no prostration, and she was not confined to her bed a single day. The wound progressed finely towards healing for several days, giving her but little pain or trouble until, upon the sixteenth, I discovered the commencement of the return of the growth, thus verifying Dr. Nelson's original diagnosis, in which I had concurred. Owing to her absence from home (she resided in Hartford, Conn.), and her great desire to be once more with her friends, added to the certainty of an unfavorable termination, further operative interference was discouraged, and she left town on the 8th of August, at which time the fungus was about the size of an English walnut, and rapidly growing. Mrs. P. lived until October, the 25th, at which time she passed away, painlessly and resigned. Here, then, was a case where an ordinary surgical operation was unadvisable for the third time, not only on account of the determined opposition of the friends of the patient, but because of her advanced age, her feebleness, and the natural disinclination of her skilful medical attendant to repeat a procedure which had twice signally failed. In my own mind, there was no doubt that it would fail again; but at least one of the consulting surgeons doubted its malignant character, and it was possible, at all events, to prolong life. This was done, as the result shows, for a very considerable time, at least three months, and thus much was gained.

CASE II.—On the 20th of June, Dr. Geo. E. Mason, a well-known and prominent surgeon of this State, called at my office with a patient of his, named Michael M., aged 27 years, who was suffering with a tumor, for which he supposed an electrolytic operation would afford the only probability of a cure. It was an aneurismal varix, situated upon the right lower jaw, the size of a large orange, extending from the symphysis to the ramus in an antero-posterior line, and involving the whole of the cheek above, with a portion of the antero-superior cervical triangle. It was congenital, and, beyond the unsightly appearance which it gave to his countenance, had troubled him but little, until within a few months, when it commenced rapidly to enlarge, and cause extreme pain, neuralgic in character.

In appearance, the tumor was purplish, the skin extremely tense, and readily emptied by steady pressure, which, however, caused great anguish. From its rapid increase in size, and from the fact that the skin covering it was becoming thinner from internal pressure, operative interference was evidently urgently demanded. And equally evident was it that no ordinary plan would suffice. Every branch of the facial artery communicated directly with the cavity of the tumor, as well as every other vessel of this extremely vascular region. Compression, from reasons above mentioned, was out of the question, and ligation of any vessel equally so. It seemed to be a question between an electrolytic operation and the uncertain plan of injecting into the tumor powerful astringents, both having, for an objective end, the formation of a clot which should afterwards be gradually absorbed. The advantages of electrolysis over injection were many and strong. Thus, no foreign material was to be introduced, possibly to be passed into the circulation, producing systemic effects; no danger was to be incurred from the possible admission of air into a vein, several of which opened directly into the varix; time was not to be lost in experimenting with various astringents, in order that the least harmful might be selected, and, finally, even so skilful a surgeon as Dr. Mason hesitated to undertake the dubious operation, when electro-surgery was so accessible and so sure.

Accordingly, on the 1st of July, I operated as follows, with the following gentlemen present, viz.: Drs. Mason, Millar, Mitchell, Carr, O'Leary, Perrin, Browning, and two medical students. The patient, seated in an operating chair, was etherized, and six needles, connected with the positive pole of a 32-cell battery, were introduced into the base of the tumor, forming a circle in such wise that the points were distant from each other about one inch in the centre, and the integument protected from galvanic action by the insulating material covering the needles up to half an inch from the end. The negative pole was attached to a sponge-covered carbon-point, and, being applied over the surface of the tumor, the current was turned on from six cells, and rapidly increased to ten. Bubbles of hydrogen began to escape beside the needles, and the tumor to enlarge from the evolution of gas, when I discovered that the negative pole had, in the few seconds already passed, vesicated the skin deeply. It was at once removed, and a large, pear-shaped needle substituted, which was introduced through the skin so as to leave as much distance as possible between the poles. Electrolysis at once recommenced, and in twelve minutes was complete, every portion of the sac being filled with a firm clot, and the surface changed to a livid white. Patient rallied well from the ether, and went home in the horse car, taking with him a simple, evaporating lotion, to keep the parts cool. Two days afterwards, the portion of skin which was blistered began to slough off, but did not in any way interfere with general absorption, which proceeded steadily until the fourth week, when it was complete, and the tumor had entirely disappeared. There is, at the present time, no trace of it left, the small needle-scars being concealed by the beard. During the entire operation, not one drop of blood was lost, and the patient felt, the same evening, as he expressed it, "first class."

These two cases have been selected from a rather large list in my case-book, as representative ones in many respects. They are of equal magnitude with any which I have been able to find any account of, either in Europe or America, and illustrate, very well indeed, the principles of bloodless operations. The unfortunate *dénoument* in the first case was inevitable in any event, and it is believed was delayed some time by employing this form of procedure; and no one can doubt that the brilliant success in the second was directly and solely attributable to the agent used, and, but for the objections raised before, no other form of operative interference would be justifiable in any form of disease where the dangers of depletion and nerve shock would be an important factor in deciding a surgeon against an operation. The instruments used in electro-surgery are so rapidly being improved as to render it a matter of some difficulty and no small expense to keep even with the onward march; but one day, there will be in the hands of every surgeon, a form of battery, at once portable, certain and cheap, and then it will be a matter of wonder that we lost so many of our patients in the days gone by.

THE DUTIES AND RELATIONS OF DISTRICT MEDICAL SOCIETIES.*

By EPHRAIM CUTTER, M.D., of Woburn.

GENTLEMEN: At your last meeting I failed to present you with a promised paper, on account of sickness in my family; and now I do not wish to crave further indulgence on account of an accident, which has caused me a six weeks' confinement to bed. I rather would seize this opportunity (as I cannot personally be present with you) to make my communication in the form of a letter, which allows me to say some things in a more direct, plain, and familiar style, than in a didactic paper. The topic to which I beg leave to call your attention, is that of "labor fields" for our society; or, to put it more broadly:

MEDICAL SOCIETY LABOR FIELDS.

It has always seemed to me that our medical societies possess a vast amount of latent power which by management might be utilized in beneficent work. That is, there are a large number of members whose powers are not brought out. They are integral parts, and when inactive, the whole organization does not perform its possible work. There is always a generous contribution when every one puts in something, and the effect upon those interested is invigorating and inspiring. This duty of contribution from each one has, when performed, a very salutary effect upon the contributor. He feels a greater interest in the object. He looks more closely and carefully to the contributions of the others. Oftentimes he finds a missing link to complete the chain of his own observation, by which he arrives exactly at the truth. But it is my purpose to point out certain fields in which medical societies may labor, the method of labor, and the manner in which they can offer an opportunity to each member to take a part, leaving the question of utility to be settled as we go along.

The first field of labor to which I would call your attention, is that of reports of *practical experience*. Not that this field is not already occupied, but that it is not occupied fully and thoroughly. The idea is to have an exercise in medical meetings which corresponds to that of the "experience" meetings of some religious denominations. Each member is expected to relate some item of his personal experience in the practice of medicine. He alone is to be the authority of his statement. Time limited to five minutes or less for each reporter. No discussion allowed. No strained or classical language required. Only the simple terms of short sentences, such as pass between friends alone. Let individuality come out. Let each reporter be kept strictly within his allotted time, and let the next one commence immediately after the previous one has ceased to speak. When this course is pursued, it is astonishing to see how each one is quickened into mental activity, as the short, plain and practical statements are made. Great interest is excited as the conversation goes on, by sudden and startling turns coming up unexpectedly from quarters where the field was supposed to be barren.

This plan of "experience meeting" has been tried in therapeutics in the late meeting of the American Medical Association. It was a success. It produced an animated scene of interest. The amount of experience unfolded, the depth of penetration, the breadth of observation, and above all the practical value of the statements elicited, were very gratifying to the proposer. The idea of hundreds of learned and skilful physicians spending time and money to go hundreds, and in some instances thousands, of miles, to meet in convention for comparison and exchange of ideas, and then spend their time in discussion of questions of medical police, by-laws and constitutions and junketings, is rather humiliating—even more so, when we reflect what a rich and full treasury of items of information they might have left behind them if they would each of them have contributed three-minute statements of truthful, honest, personal experience which they deemed of the most value to themselves.

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* A letter to the Middlesex East District Medical Society, November 4, 1874.

It will be noticed that this field of labor is made very simple, made up of anything of personal experiences. If the *esprit de corps* of the society would bear it, it might advantageously be confined to one subject, given out before hand, if *every member would report upon it. The reporting of each member constitutes the main interest in the exercise. It is not the subject.* How such subjects might thus profitably be investigated, may be illustrated by referring to the history of the therapeutical investigations of your Society into the use of *veratrum viride*, some years ago. There is no doubt that this work was well done and well received, as its results are regarded as authoritative by scientific men. To take a particular case:—Suppose that the Massachusetts Medical Society in each district should investigate the therapeutical properties of ozone, every member testing it, and reporting at a district meeting. The secretary could combine the verbal reports in one, digesting and classifying the results, and then sending them to the secretary of the parent body, who would combine these in a compact, decisive report, to be read at the annual meeting. Would not such reports be valuable, and sought after?

I suppose some would say that this is impracticable, because physicians will not have confidence in each other, because of jealousy or contempt. Not all would be honest enough to tell the truth, or to believe that what was reported was true. If this be so, what a sorry figure does our noble profession present? I deny it.

Another field of labor is, the *supply of educated nurses.* It is a matter of congratulation that one of your number has initiated a movement which will give a supply of nurses educated at the Massachusetts General Hospital, but the supply will be so limited that, practically, it will not meet the demand for skilled laborers as nurses. It seems as if every member of our organization should take a deep interest in a matter which so vitally concerns his professional success. The whole labor of the physician can be annulled by bad nursing. How would it answer for each member to furnish to the secretary a list of nurses, and let him embody the record into one, have them printed, and distributed to each member? Then might not there be a committee of the Society—say the Censors—who should personally, or otherwise, examine into the qualifications of the nurses, and those who were found to be qualified should be so designated on the list, and should be preferred in selection and recommendation? In other words, have a sort of procedure like that pursued by Harvard College in their examination of women. There might be some one appointed to give occasional instruction to persons desiring to become nurses, just as was done at the beginning of our late war. The mere fact that physicians were giving their attention to this subject would have a salutary influence upon the nurses, and would enhance the reputation of the profession.

The wonderful success attending the daily reports of the meteorological condition of stations scattered over the country, is a good example of what might be done in medical societies in the *reporting of the prevalence of disease and its probabilities*. Reports of the state of the weather, laborious and careful ones too, have been made for many years, but, being isolated and non-contemporaneous, they have practically amounted to nothing but examples of patient, faithful industry. The systematic contemporaneous observations of a large number of coöperative observers of the weather has produced the wonderful prediction of the weather for the United States, so that "Old Probabilities" is consulted by the physician to see whether he shall ride in an open or covered carriage; and, on the other hand, the system that makes "Old Prob." possible is being adopted by other nations. Is it too much to hope that if medical societies everywhere should honestly adopt a similar field of labor in relation to epidemics and other diseases, the laws of their visitation and spreading would be ascertained, so that the predictions in relation to them would be as valuable and interesting to physicians as the weather reports are now to physicists?

In this field also comes the reporting of cases of disease, not deaths only. Suppose this society had continued the reports of cases of zymotic diseases, so auspiciously kept up for seven years. Suppose, also, that other medical organizations had done the same. Who doubts that the information thus obtained would now be regarded as the most valuable and authoritative? This system requires that each member report his cases annually. Thus he makes a contribution which is an integral part of the whole. His contribution is just as valuable, necessary and important as that of any one else. There is a sort of true republican equality which does away with invidious distinctions and exalts all into a uniform character of excellence. I know of no exercise which so much includes and compasses the true, legitimate and healthful exercise of the powers and faculties of medical societies as this very reporting of statistics of cases of disease.

Another field of labor is the *suppression of quackery* by proper legislation in this State. "It is done in other States, why not in this?" was pertinently asked by a physician the other day. It is not enough to fulminate ridicule and exposure in our annual ante-prandial discourses. It is not enough to write boldly about it. The disease of false medicine is too old, too chronic, and too pleasurable to be kept in check (it can never be eradicated as long as human nature exists as it is) by single, isolated, uncombined efforts. It requires coöperation, contemporaneous, wide spread as the evil, and equally persistent. Our medical society might discuss the subject, every member taking part and declaring some opinion. A committee might be chosen to investigate further and report some method of action. When this is submitted it should be discussed, every member bearing some of the labor of digesting and correcting. The final adoption should be perfectly unanimous. A statement of this action should be sent to each sister society, inviting attention and coöperation in a similar manner. Suppose they discuss and adopt the proposition, and when the time for the annual meeting of the parent body comes, all unite in presenting the matter for adoption. Can any one doubt that our laws would be favorably modified in relation to quackery, or any other thing, when all the influence, direct and indirect, of twelve or thirteen hundred educated medical men all over the State is combined and exerted at one time unanimously in relation to it?

Besides this, the laws would be executed. For with such a grand, united influence, public opinion would be healthily formed and so strongly set that our courts would not dare to allow the law to become a dead letter, as unfortunately so many of our written laws already are. But whose fault is it, if not in the state of public opinion and the causes that make it?

Directly in connection with this is the making the employment of *medical and surgical experts* by plaintiff and defendant illegal, and the substitution of experts appointed by the courts. It is well known that, in medico-legal trials, scientific testimony is made to appear irrelevant or apparently contradictory by the present plan. Doctor is pitted against doctor, surgeon against surgeon, chemist against chemist. One may be a thorough scientific master, the other an ignorant tyro with a degree. The former may make an assertion based upon long, intimate and accurate personal observation, and the latter deny it *in toto*, his assurance being inversely as to actual knowledge; and yet, in the jury-room, the unblushing ignorance of the latter may outweigh the modest knowledge of the other. Then it is human nature for each to defend the side upon which each is retained. They may both be *truly* experts—as a child would say—still the scientific conflict is not apt to be creditable to our art, and the end of justice is liable to be defeated. To bring the case nearer home, any one of your number may be threatened (some already *are*) with suits for malpractice. Under the present system, is the outlook comfortable of having justice administered aright? The plaintiff summons so-called doctors, irregular ones it may be, who swear in the strongest terms, as *experts*, that the defendant has culpably done a great wrong, for which he should be mulcted in heavy amounts. The defendant's experts testify to the contrary, on the law and the evidence. How can a jury be expected to render a righteous verdict? How much better it would be to have a scientific, impartial commission, appointed by the court, to decide the technical points! Would not the defendant feel better? Would there be drawn down on the profession the present reproach as to their experts? In my opinion, the matter should be taken up like that suggested in relation to quackery. It would not be long before a change would be effected, removing, in a measure, the unpleasantness of the present situation.

Patronage of Original Investigation into the Causes of Disease.—In this country, patronage is not extended to original investigators as it is in the old; our government does not liberally reward inventors and discoverers by monetary grants as does the English. If Jenner had been born, and conducted his researches, in the United States, it is very doubtful whether he would have received the liberal fortune that was voted him by government. The action of Congress, in relation to the discovery of anæsthesia, clearly shows how unwilling our rulers and legislators are to award money, titles or distinction upon any benefactors of the human race in the medical line. It is so in relation to other things. Not long ago, the English government awarded £20,000 to an inventor of a brake for locomotives. If this individual had made this improvement in this country, he would have looked in vain to Congress for $100,000.

Now, the question is, do not original investigators into the causes of disease need encouragement or patronage? I think that they do need it. They have to possess a good deal of enthusiasm and sacrifice, to follow out the difficult paths of research. It is to be supposed that they have the gifts for such work, or their inclinations would not have led them into it. In the absorption of their powers in their explorations, their time and talents are taken from the routine business of their profession. By this, their support is cut off, for investigators are not always rich. Or, if they practise their profession for support, just so much vital force and energy is abstracted from the pursuit of their investigations; so that the cause of science is a loser, and with it humanity.

Well does Hamerton ask, where would have been the splendid researches and additions to knowledge made by Michael Faraday, had not a sinecure position been conferred upon him, which gave him a liberal support, and rescued him from the drudgery of poverty?

But suppose our laborer has overcome the obstacles of poverty and distraction, and comes forward to announce his discovery, how is he apt to be received? It seems to me that his situation is often very much that of an Indian captive running the gauntlet. One doctor hits him a clip with saying, "Oh, that's an old thing revamped!" Another assaults him with, "That's exploded years ago!" Another says, "Simpson and I tried it, and it failed!" Another, "That's my invention!" And so on through the double line of hitters. Sometimes, ridicule is thrown at him. Sometimes, one, more hardy and self-possessed, will, with a learned article, explode the poor fellow, as with a mine of gunpowder, and the rest, seeing so much of an exhibition, unthinkingly encourage the exploder, and the discoverer feels ashamed, and retires with disgust.

As the writer looks at the matter, it stands thus: Every medical man has received an inheritance from the past. He is bound to transmit the legacy unimpaired, and even increased, if it is possible, from opportunities, gifts, &c. If this is true of single medical men, it is more true of them in an associated capacity. Hence, I infer that whenever a proper person brings a communication which he thinks is original and valuable, the medical body, or public, before which he makes the presentation, should have the courtesy to receive the offering in the spirit in which it is offered. Give it a respectful consideration, and be very careful how criticism is offered, lest the sensitive nature of the discoverer be injured. Suppose the communication should prove to be different from what the offerer thought; instead of ridicule, or rough putting aside, he should be praised for his intention, and requested to try again, and bring another offering. It often happens that inventions and discoveries are made contemporaneously in two or more places without knowledge of each other; but this should not invalidate the claims of either. The society should show a friendly spirit, speak a word of encouragement, use its *influence* to stimulate the pioneer in his future labors. This is what I mean by *patronage*, and I think that this kind of patronage would do no harm, but much good. If such a spirit of patronage were cultivated generally in our sister societies, it would hasten the day of the discovery of typhoid fever germs, of smallpox, rheumatism, scarlatina, measles, and like diseases. In the establishment of the Army Medical Museum, and its publications, our government has shown a remarkable example of healthy, fruitful, natural patronage. May we see more such!

We wish also that medical societies would discuss the question, whether physicians of advancing age, wealthy, enjoying a large and long practical experience, should not relinquish their practice to some extent, for the purpose of giving their attention to original investigation (like the late Dr. Perkins, of Newburyport,) either as laborers, or patrons of laborers. They would be expected to choose such topics as by experience they were convinced needed investigation the most. Ripe in judgment, trained in observation, warped not by prejudice or self-interest, rich in resources of accumulated knowledge, looking into eternity, how gloriously could such a body of laborers terminate their earthly career, and to how great advantage to mankind!

The common spectacle of such physicians spending their wasting physical strength in the hard routine of practice, when it is not necessary for support, and simply for occupation, is, I think, a melancholy one, when there is such a noble field unoccupied, in which there is room for the largest exercise of their powers in a healthful, invigorating, and delightful manner. Let us who are young prepare our minds, that when our physical strength declines (allowing that we shall have the pecuniary ability), we may devote ourselves to such work, which will be our best monument after we have passed away.

The last field that I shall allude to, is that of labor in *public hygiene and medicine*. I hope the time will come when it will be a frequent occurrence to have questions brought by municipalities to medical societies, as I understand was done in Albany lately — the city referring the question of the purity of a water supply from a certain source to the Albany Medical Society, and abiding by its decision. This is one of the aptest things of the day. It was honorable all around. It was satisfactory. I have not the least doubt that medical societies could decide questions of sewerage, drainage, clean streets, clean household surroundings, slaughter-houses, and rendering establishments, if applied to by the proper authorities; and that cities and towns would be great gainers in health and longevity, if they would advise with, and act upon the suggestion of, the local medical societies. I think, also, that if architects would consult the same bodies in relation to the location of dwellings, public buildings, and manufacturing establishments, in relation to ventilation, heating apparatus, and arrangement of apartments in buildings, there would be a great improvement in the housing of men and animals, and a staying of death from impure air. Further, I believe that architectural perfection will not come until this mutual consultation is had.

I think, also, that medical societies might occasionally instruct the public as to articles of diet. For instance, suppose they examine the subject of the premature decay of teeth, in children, and find as I have done, that one cause of it is the deficiency of mineral matter in flour (wheat). I had the "peerless flour" analyzed, and it was found that it contained only 0.55 per cent. of ash, when whole wheat grain yields 1.65 to 3.1 per cent.; that flour has only one third to one sixth the proper amount of mineral matter to make teeth with; that a dentist finding his first child's dentition late, irregular, and prematurely decaying, placed his wife during her second pregnancy upon the use of whole grain flour, and when proper, placed the child upon the same diet; that this change of diet was followed by a regular normal dentition with undecayed teeth; suppose, I say, that this experience should be confirmed by the observations of the society, till they were satisfied of its truth, and then the public should be warned of the exclusive use of flour by an official announcement of the society; would not a great blessing be conferred upon the rising generation, some of whom are toothless, and worse than toothless prematurely, simply from too much flour?

How long would it be before Dr. Toner's admirable idea of public free camping grounds and parks for the sick and poor would be carried out, if every medical society adopted it, and recommended it?

So of free public baths. Indeed there are no worthy sanitary measures which might not be adopted, were physicians generally united in their favor.

The State Board of Health in Massachusetts is eminently the work field of physicians. I hope that every medical society will sustain it to the utmost.

Let us come up to our work like men, leaving behind, as philanthropists, all jealousies, strifes, and want of harmony. Let us by cöoperation, action, labor in the fields set before us. There shall we bring out our latent powers for good, and cause streams of blessings to flow upon our race, which shall not cease to flow till time ends. We will go down to our graves with the satisfaction that we have done what we could.

Woburn, Nov. 4, 1873.

STRANGULATED HERNIA SUCCESSFULLY TREATED BY PNEUMATIC ASPIRATOR.—An engine-driver, aged 50, had suffered for three months from inguino-scrotal hernia. He was first seen by Dr. Nairnes, on the night of 8th October, at 11.30, when the tumor in the scrotum was found to be tender on pressure, the patient suffering intense pain, and harassed with frequent vomiting, flatulence and general uneasiness. All efforts at reduction failed. The attempts to restore the intestine by means of taxis were renewed the following morning, the patient being put under the influence of chloroform, but the results were still negative. Dr. J. P. Bramwell, who had been called in consultation, now suggested the employment of the aspirator. A No. 2 needle (Dieulafoy's) was accordingly thrust at right angles to and well into the sac; on turning the tap, about two drachms of a serous fluid and bubbles of gaseous matter were drawn into the instrument—a sure proof that the bowel had been perforated. The aspirator was now emptied and again set, and the needle drawn somewhat outwards. This change of position evidently placed the point in the hernial sac, out of which was drawn from four to five ounces of sero-sanguineous fluid. The tumor suddenly collapsed, and, on manipulation, the hernial protrusion was found to have disappeared. The patient made a rapid recovery. In his remarks upon this case, Dr. Bramwell questions whether any surgeon is warranted, as a rule, in performing the old operation for hernia, before having tried the simpler and safer plan of aspiration.—*Edinburgh Medical Journal*, Dec., 1874.

Progress in Medicine.

REPORT ON SURGERY.

By J. Collins Warren, M.D.

(Concluded from page 591.)

Ligature of Arteries in their Continuity (*Centralblatt für Chirurgie*, No. 32, 1874).—Ed. Lang, of Innsbruck, gives a *résumé* of eleven cases of ligature of arteries: Twice the common carotid, four times the lingual, once the subclavian, twice the external iliac, once the femoral in Scarpa's triangle, and once under the sartorius.

1. Gliosarcoma of the right tonsil. Osteo-plastic resection of the lower jaw, ligature of the right common carotid previous to extirpation of the tumor. Death at the end of ten days. Immediately after the ligature, bluish discoloration of right side of face and temple; also enlargement of the temporal artery. The operation was as bloodless as upon the dead body. Embolism of the arteria fossæ Sylvii brought on apoplectic symptoms and death.

2. Recurrent sarcoma of lymphatic glands on the right side of neck. Extirpation. Ligature of the common carotid during the operation. Recovery. The recurrence of the sarcoma, accompanied by hæmorrhage, rendered an operation necessary; during the operation, the bleeding was so excessive that it was necessary to tie the carotid.

3. Carcinoma of tongue. Extirpation after ligature of the right lingual artery. Recovery. Subsequent return of the disease, with usual result.

4. Carcinoma of the tongue and of the floor of the mouth, and of the lower jaw. Ligature of both lingual arteries. Extirpation. Œdema of the glottis. Tracheotomy. Death from septicæmia. In this case the larynx was so low down in the neck that the incision for tracheotomy had to be extended to the sternum and the thyroid cartilage drawn up by hooks and forceps.

5. Carcinoma of tongue and floor of mouth. Preliminary ligature of one lingual artery. Extirpation of the growth. Diphtheritis, pyæmia, death. A pyæmic inflammation of one sterno-clavicular joint existed.

6. Union, with deformity, after fracture of the neck of the humerus. Resection of the projecting end of the lower fragment. Hæmorrhage from a resulting abscess; ligature of the subclavian under the clavicle; recovery. Reflected light was used to illuminate the deep parts of the wound during the operation.

7. Compound fracture of the right thigh. Hæmorrhage from an abscess. Ligature of the right external iliac. Death from exhaustion, on the twenty-third day after ligature. At the autopsy, the ends of the arteries were thickened to double their size by growth of the middle coats; there was also amyloid degeneration of the liver, spleen and kidneys. At the seat of fracture, a hollow cylinder of new bone enclosed the fragments, which were still movable.

8. Severe injury to the left leg. Amputation through condyles of femur. Ligature of femoral in Scarpa's triangle, of the external iliac, and, finally, of the branches of the femoral in the triangle, for secondary hæmorrhage. Recovery.

9. Total necrosis of left femur. Removal of the sequestrum. Ligature of femoral under the sartorius for uncontrollable hæmorrhage. Recovery. Ligature difficult, on account of the inflamed and thickened tissue.

A Method of treating White Swelling of the Joints, more especially of the knee-joint, is given by Richard Barwell, F.R.C.S. (*British Medical Journal*, Oct. 17, 1874). The writer bases his treatment on the fact that, "after the first phase of the disease, strumous synovitis, the fungoid disease of the joint is not inflammatory, is not overaction, but underaction; and that some treatment to excite action, not rest, lotions, &c., which discourage action, is the right method of treatment."

The writer further says:—"As we stimulate indolent, flabby granulations of an old ulcer or of a wound by nitrate of silver or sulphate of copper into the production of a tissue, so it struck me I might also, by a direct application, stimulate sluggish tissue of a strumous synovitis into a more healthy condition; and for this purpose injection of minute quantities of a stimulating drug seemed to me the most direct method."

The fluid injected by the writer consists of half a drachm of the tincture of iodine to the ounce of water. The method of using the drug is thus described:—"A syringe with a very fine needle should be used, and care must be taken not to inject into the cavity of the joint, but into the thickness of the morbid tissue." Injection must not be employed when any active inflammatory process is going on; the temperature of the joint must not be at all higher, or but a portion of a degree higher, than that of the opposite side. No pain should exist, at the most only a dull aching, "which is rather a sign of fulness of the veins than of arterial hyperæmia." The puncture should be made in the softest and most prominent parts of the tumefaction, making from two to four punctures; into each of these punctures he injects about five minims of the fluid, withdrawing the needle a little as the piston descends, so that the fluid occupies a line rather than a spot of the tissue. After injection, he uses compression by means of an elastic bandage put on with such tightness as will escape producing congestion or œdema of the limb below. The effects are quite painless, save the puncture. In all cases, he says, decreased size, increased hardness of the tumor, with disappearance of the dull, aching pain has resulted, and the renewal of the use of the joint to an extent according to the amount of injury which the disease had already produced. As the tissues of the joint harden more and more under the use of injection, so may passive movement be used with considerable freedom. The author gives two cases successfully treated in this manner.

Subcutaneous Division of the Neck of the Thigh-bone.—Mr. William Adams continues to perform this operation, which he has now done for the fifth time. An account of his last operation is given in the *British Medical Journal*, July 11, 1874. The patient, a girl, aged 18, began to suffer from disease of the right hip-joint when she was eight years of age; for the last eight years, her right thigh had been permanently deformed, flexed and adducted, so that the knee rested over the centre of the left thigh. She formerly walked with two crutches, but had lately used only one. She had never worn a high-heeled boot of any kind, and the toes of the right foot, when she stood up, were about six inches from the ground. Thus the leg was perfectly useless, and was atrophied. The patient having been placed under chloroform, a sharp-pointed scalpel was inserted from above the trochanter and passed across the front of the neck of the femur. A fine saw was then introduced at the same aperture, and the bone was divided in a little more than four minutes. Richardson's styptic colloid on cotton-wool, carbolic-oil dressing, and pads of lint were at once applied. The tendons of the tensor vaginæ femoris, adductor longus, and rectus femoris were then divided subcutaneously, and the whole limb was finally fixed to a long, straight, outside splint. The limb, which, before the operation, had been flexed at a right angle to the pelvis, was, after the operation, placed in a state of complete extension. This was the first case operated upon by Mr. Adams, in which the union was not bony, but the movement at the joint was so slight that no other mode of procuring relief seemed to offer much chance of success. The operation has now been often practised; Mr. Bryant has performed it twice at Guy's Hospital, and Mr. Maunder once at the London Hospital. These three cases and Mr. Adams's previous four cases have all healed without suppuration.

Dr. H. B. Sands, of New York, reports a case, operated on by this method, the patient being twenty-five years of age. In this case, there was, also, no bony union, "but a useful and satisfactory false joint resulted."

Incision versus Excision of the Knee in Children is the title of a paper by Edward Lund, F.R.C.S., read at the annual meeting of the British Medical Association. Mr. Lund argued that, in a large proportion of cases under twelve to fifteen years of age, the incision was the better operation. The mode of procedure was peculiar, inasmuch as he only opened the joint by an incision in its external side, and through this, by means of a curved cutting hooked knife, which was passed into the joint, or so much of the natural cavity as remained, all adhesions were broken down, or cut through, so as to permit the bones to be replaced in a straight line. It was rarely possible to do this immediately, on account of the contraction of the tendons; but several contrivances were shown, by which, by the use of elastic, India-rubber bands, long-continued, slight pressure produced excellent results, and firm, straight anchylosis of the knee was the result. It was, however, one essential condition of the operation which Mr. Lund recommended, that it should be conducted entirely upon Mr. Lister's system of antiseptic dressing, for without these precautions it might, in many cases, prove a hazardous proceeding.

Massage.—M. Fontaine gives a contribution to the subject of treatment of sprains by massage (*Archives Méd. Belges*, 3, 1874). The author became interested in this subject on hearing of great success attending the use of massage in all forms of injuries to the limbs by a certain female practitioner in the village of Thelin, Belgium. M. Fontaine has had great success himself with the massage. The limb is first covered with oil, and the part is rubbed with one or both thumbs, in gentle movements, from the extremities upwards, following, in general, the direction of the muscles and tendons. The affected, painful spot should be rubbed gently, while the healthy neighboring parts should be treated more energetically, and the muscles at times thoroughly kneaded. This manipulation should last from a quarter to half an hour, and should be repeated three times daily. In the interval, the limb should be raised and bandaged. According to the author, massage acts favorably, by spreading the extravasated blood over a large surface, and thus favoring absorption.

By the rupture of the vessels, the blood is extravasated between the ligaments, tendons, and the sheaths of tendons, and becomes the chief cause of pain and swelling, and crepitation frequently felt.

The author thinks that all forms of acute or chronic joint-inflammations are thus avoided.

Diseases of the Anus and Rectum.—Hayem's Review (Vol. ii. 1874) contains extracts from a paper on this subject, contributed by Esmarch to von Pitha and Billroth's Surgery:—

Prolapsus of the Rectum.—The author notices the complications of this affection, chiefly hernia, existing in a sac formed by the peritoneum, which the prolapsed rectum draws down with it. This hernia can become strangulated; in case it cannot be reduced by taxis, the sac may be laid open from the perineum, or, as has been done by Bünger in one case, to open the abdominal cavity on the median line, and draw up the sigmoid flexure, which had become strangulated; the patient recovered. In the way of treatment, the author recommends the actual cautery applied to the anus, a plug of cotton batting having been previously introduced into the rectum.

Growths in the Rectum and Anus.—The benign growths are polyps, which belong to the class of papillomas or adenomas. The latter are the most numerous.

Cancer is most frequently epithelial, of pavement form at the anus, and cylindrical in the rectum. The latter often becomes alveolar. The consistence of these growths varies from that of a scirrhus to colloid cancer. They are rarely pediculated, and generally infiltrate the surface and deeper parts, converting the rectum into a rigid tube, and invading neighboring organs. Sarcoma is very rare; melanotic sarcoma has been observed.

Although epithelioma ulcerates early, Esmarch thinks that cancer of the rectum can remain several years without causing serious complications.

For the purpose of diagnosis, he recommends exploration of the rectum by introducing the whole hand, as described by Simon. He is in favor of extirpation, and gives a number of successful cases. The author cites a case examined by Billroth four years after the extirpation of a circular cancer, by Schuh, in which there had been no return of the disease. If complete extirpation is not possible, he recommends scooping out the disease with a sharp edged spoon, to diminish pain and facilitate emptying the bowel. He is not in favor of making an artificial anus as palliative treatment.

Catheterization of the Larynx.—Dr. von Hüttenbrenner (*Jahrbuch für Kinderheilkunde*, Jahrg. viii., 1 Heft), in an article on catheterization of the larynx in croupous and diphtheritic affections, comes to the following conclusions:—

1. At each introduction of the catheter or of Weinlechner's tube into the windpide, the child is liable to become asphyxiated. This occurs from difficulty in introducing the catheter without proper assistance, or from separation of membranes or fragments thereof, which cannot

be coughed up, and falls down into the trachea or on to the bifurcation of the bronchial tubes.

2. Catheterization performed repeatedly, at each return of dyspnœa, is found to be injurious, for, while it does not do away with tracheotomy, it taxes, in a high degree, the strength of the child.

3. It is almost impossible to avoid wounds of the mucous membrane in the buccal cavity during introduction of the gag, and, during catheterization, superficial abrasions are also likely to occur; these bleed readily, and, in a few hours, are covered with a croupous or diphtheritic membrane.

4. Catheterization of the larynx is of temporary benefit only, the effect lasting but a few hours, followed by a return of the previous symptoms.

5. The operation requires numerous and skilled assistants. It cannot, therefore, be readily employed in private practice.

6. Where rationally employed, the operation should be resorted to but once, and then only to gain time. With this exception, it should never be employed in croup, since, with all its dangers, it never takes the place of tracheotomy.

The remarks made by the writer in this article were not intended to refer to the indications for catheterization of the larynx in other diseases than those above mentioned.

Bone Absorption.—Dr. Alexander Morison, of Edinburgh, a former pupil of Kölliker, has continued his researches on bone absorption by giant-cells. These cells, as is now known, are to be found in the line of demarkation which separates the sequestrum from the live bone about it. The small, circular hollows, found on the surface of the sequestrum, which exactly fit the granulations on the living bone, were described, long ago, by John Hunter. It is the histology of this vascular layer, and of these "small, circular hollows," which has been the subject of investigation by Dr. Morison; and if we have not even yet been informed how absorption of bone is actually effected, we have, at least, been made acquainted with various steps in the process. Kölliker showed that absorption in the normal course of the development of bone produces small cavities, and that these are filled, without exception, with giant-cells, or myeloplaques—with one, a portion of one, or several. He believed that these giant-cells arise from osteoblasts (the cells from which bone-tissue is developed), and that they are the agents by which bone (and tooth) are normally absorbed. Morison's investigations go to support this description and opinion. He has seen intermediate forms between osteoblasts and giant-cells; but he is inclined to believe that the latter may also arise by the aggregation of the nuclei of embryonic connective tissue in the spaces in the edge of bone which is being absorbed. It is possible, also, that the giant-cells may grow by proliferation of the connective tissue in the wall of a capillary. Whatever their origin, the presence of these peculiar cells in the line of absorption of bone seems to be now fairly established, and the idea may be entertained that their function is a destructive one. When separation is complete, they would appear to be succeeded by constructive or formative cells, which arise from the embryonic connective tissue about them.

Tannin as a Surgical Application.—Mr. Philip Miall, in a communication to the *British Medical Journal* of Nov. 7th, extols tannin as an astringent in surgical dressings.

The strong solution of tannin is, he says, a most powerful astringent, almost free from irritating properties. It is one of the best dressings for wounds—far superior to collodion, and even less irritating than the styptic colloid, which it somewhat resembles. If applied by a brush, and allowed to dry, it soon forms a pellicle, which excludes the air, and gives ease to pain. To prepare it of full strength, an ounce of perfectly fresh tannin must be mixed with six drachms of water, in which it readily dissolves. The solution is a thick fluid, of the color and consistence of treacle, which keeps much better than tannin itself. He is in the habit of prescribing it as Martin's solution, having learned it from a paper by Mr. Martin in the *British Medical Journal* of March 20th, 1869. Mr. Martin recommended it as a method of converting living skin into leather.

Most of the tannic acid found in shops contains a large proportion of gallic acid, and will not yield a very strong solution. But, if an ounce of old tannic acid be mixed with two ounces of water, a tolerably strong solution, which answers for many purposes, may be decanted off after subsidence.

It may be applied to almost any form of ulcer, and to wounds after amputation or other operations, especially when not very deep. It answers well, for instance, after the operation for hare-lip, applied in the same way as collodion is sometimes used.

In a female, aged 26, the hair was caught between rollers and the whole scalp removed to within an inch of the left eyebrow and two inches from the right, round on a level with the tips of the ears to about the external occipital protuberance, the periosteum being extensively removed at the vertex. There was much suppuration, followed by erysipelas. After three months, exfoliation of bone occurred, and skin-grafting was performed, first with eleven grafts, and, six weeks subsequently, with twenty-one. After varied treatment, antiseptic and other, little progress was made, till, nine months after the accident, strong tannin-solution was applied. Discharge and fœtor diminished at once, and the healing process went on more quickly than before. Tenderness diminished, and the general health improved rapidly for the first time since the accident. The wound, eighteen months after the accident, was about half its original size, and the discharge trifling.

Strong tannin-solution, applied to the ulcerated skin of ingrowing toe-nail, at once removes pain. After one application, the offending corner of the nail may be readily raised, a little lint inserted underneath, and the nail allowed to grow up.

Chronic phlegmonous erysipelas in the legs may be painted with it with great advantage. He has not found it so useful in acute erysipelas or erythema.

The Treatment of Hydrocele in Infants.—M. Marjolin (*Lyon Médical*, No. 18, 1874) states that this affection is cured spontaneously in the majority of cases, and that there is danger in puncture, owing to the frequent communication of the cavity of the sac with the peritoneum. Hydrocele does not interfere in any way with the development of the testicle. If puncture and injection are necessary, the finger should be placed at the neck of the sac, to prevent the entrance of fluid into the peritoneum. M. Marjolin uses the tincture of iodine, but does not state of what strength.

Bibliographical Notices.

Transactions of the New Hampshire Medical Society. Eighty-fourth Anniversary, 1874.

It is agreeable to note the fact that the New Hampshire physicians believe in the promotion of good fellowship and fraternity by a semi-annual gathering, at which social exercises are substituted for the more solemn and elaborate scientific proceedings to which the annual meeting is devoted. In this judicious interchange of recreation and instruction, our neighbors set a good example, which we should like to see generally followed.

The Annual Address of the President of the Society, Dr. Swett, of Newport, was devoted to the consideration of a theme which, in these latter days, has proved both seductive and difficult—the duties of the profession in relation to alcoholic preparations. The subject is treated with evident sincerity, growing out of strong convictions. Occasionally in the discourse, the zeal of the philanthropist and the reformer is substituted for the calm and dignified impartiality of scientific investigation; but in general there is a gratifying absence of that intemperance in expression and ideas which too often characterizes the efforts of temperance advocates. The author places himself at a disadvantage by adopting, as infallible, the conclusions of Lallemand, Duroy and Perrin concerning the action of alcohol in the system, conclusions which have been repeatedly refuted by the observations of more recent physiologists. The views of the authorities above named have served a good turn for the cause of temperance, but it is time they were quoted with something more of reserve than has been customary.

Passing to the clinical and pathological part of his address, Dr. Swett gives abundant evidence against the abuse of alcohol, medicinally or as a beverage. The effects of alcohol on the digestion are portrayed with vigor. "Strong drink" gives no assistance to a man's healthy mental or physical powers, but rather curtails them and shortens life; it does not enable one better to withstand cold or heat; "metamorphic changes are retarded, and thus a large amount of carbonaceous element is retained in the blood, deteriorating that fluid . . . . or else is deposited in abnormal proportion about the heart, liver or kidneys, producing what is called fatty degeneration."

The address closes with an exhortation to physicians to use their special opportunity in impressing on all with whom they come in contact the evils which alcoholic intemperance entails. "To physicians more than to others, does it belong to show that inebriety is a disease, hereditary as well as acquired, and that no legal enactments, whether license, restrictive or prohibitory, can be of much avail until the sentiments of the people become sustaining, and such enactments have for their basis pathological knowledge."

The Annual Oration, by Dr. Dinsmoor, dealt with quackery, especially that which is within the pale of the profession. Among the manifestations of this empiricism, the author mentioned a too reliant faith in the self-limitation of diseases and a consequent distrust of medicines; a habit of misrepresenting to patients the severity of their diseases; the production of abortion; the prescription of alcohol in wasting diseases; the abuse of consultations; and the consulting with irregular practitioners. Dr. Dinsmoor proposes a radical measure for the treatment of the quackery which is not confined to the regular profession; he would "advocate the enactment of a law making it a *felony* to practise medicine or surgery without a license from competent authority."

Dr. Frost, of Hanover, presented an Essay on Tuberculosis, giving a concise review of the prevailing opinions concerning the pathology of the disease. His own opinions inclined him to adopt the hypothesis of Niemeyer, that tuberculosis is usually of inflammatory origin.

In an elaborate and very instructive paper on Climatology, Dr. Ham, of Dover, discussed the changes which have been observed in our climate in a long series of years, and the effects of those variations on disease. He concludes that our climate has not undergone a change in temperature, nor as regards rainfall, but that as the direct result of man's agency in felling the forests, in agriculture, in the building of canals and railroads, and in the introduction of a general system of drainage, the atmosphere has become more dry. As a consequence, in part, of this lessened humidity and so of the diminished amount of ozone in the air, we have a progressively lessened mortality-rate from phthisis and other respiratory diseases.

The Treatment of Marasmus, Whooping Cough and Debility in Children by Electricity. Re-printed from the Detroit Review of Medicine and Pharmacy, October, 1874. *The Longevity of Brain-Workers. Cases of Hysteria, Neurasthenia, Spinal Irritation and Allied Affections.* Re-printed from the Chicago Journal of Nervous and Mental Diseases. By **GEORGE M. BEARD**, M.D., New York.

DR. BEARD's experiments, made upon babies and the young, whether suffering from diseases of various kinds or from debility alone, have led him to the conclusion that infants are even less susceptible to electricity, whether general faradization or central galvanization, than adults, while at the same time "all the sedative and tonic effects of its application—improvement in sleep, in appetite, in digestion, and in muscular growth and increase of capacity for work—are realized by children as markedly as by adults, and with fewer apparent exceptions and fewer injurious results.

Furthermore, central galvanization, applied for five or ten minutes three times a day, was found of specific benefit in nineteen cases of whooping cough.

The results are of great interest; but, as we know so little, definitely, as to the part played by the central nervous system in controlling the nutrition of the other parts of the body—in the production of whooping cough, for example—we must be circumspect in drawing conclusions from them.

That active brain-work predisposes to disease and a short life, is satisfactorily shown to be untrue.

The conditions necessary to health are too complicated to be satisfactorily dealt with in a few rules of thumb about exercise and good hours.

Such is the power of adaptability of the human organism that, in spite of luxury and mental toil, which are supposed to pull and push their owner towards an early grave, good, if not perfect, health still remains within the grasp of a cultivated intelligence, and the power of purchasing means of protection, comfort and cure.

For the cases of hysteria, &c., which do not admit of a short notice, we refer to the original. They contain nothing of unusual interest.

BOOKS AND PAMPHLETS RECEIVED.

The Diseases of the Stomach. Being the third edition of the "Diagnosis and Treatment of the Varieties of Dyspepsia." Revised and enlarged. By Wilson Fox, M.D. Philadelphia: Henry C. Lea. 1875. Pp. 283. (From James Campbell.)

The Early History of Practical Anatomy. Introductory Address. By Wm. W. Keen, M.D. Philadelphia: J. B. Lippincott & Co. 1874. Pp. 43. (From James Campbell.)

Orthopœdia. A Treatise on the Human Form. By James Knight, M.D, New York: G. P. Putnam's Sons. 1874. Pp. 364.

The Longevity of Brain Workers. By George M. Beard, M.D., of New York. Pp. 16.

The Legitimate Influence of Epilepsy upon Criminal Responsibility. By Meredith Clymer, M.D. (From the Proceedings of the Medico-Legal Society of New York.) New York. 1874.

Boston Medical and Surgical Journal.

BOSTON: THURSDAY, DECEMBER 24, 1874.

THE letter, which we publish to-day, from Dr. Cutter to the Middlesex East District Medical Society, though open in some points to criticism, is worthy of careful consideration. We welcome suggestions of this nature, even when we do not quite endorse them, as they often give rise to profitable discussion. We agree cordially with Dr. Cutter as to the reforms and improvements he suggests, though we are inclined to question the advantage of the plans by which he suggests that some of them should be brought about. We must mention, by the way, that some of the shortcomings he alludes to have not been overlooked; the State Board of Health has taken up the matter of reports of prevalent diseases, and we were the first, after the notorious Alley trial, to urge a reform in expert testimony. Efforts have been made to obtain legislation on the subject, but so far without success. It is not necessary to look to Albany for an example of a city asking advice on the water question from competent medical men; this has been done in Boston. But it remains to be seen if the advice will be followed.

It is certainly desirable that all possible light should be thrown on subjects discussed at medical meetings, but we are not sure that the plan proposed would work well in practice. Few men are versed on all subjects, yet according to this plan every one, no matter how ignorant, must speak. We shudder at the agony with which those really acquainted with the subject under discussion must listen to the talk of those that know nothing. It can hardly be flattering to one who, for instance, has passed his life in the study of obstetrics, to have the opinion of a recent graduate, who may never have seen a case, put on an equality with his own, particularly as this plan forbids the discussion by which the strength or weakness of any view would be made evident.

We do not quite understand Dr. Cutter's position concerning the treatment of original investigations. The object is to advance science, and this can only be done by good work. Bad work retards it. Undoubtedly it is better to have tried and failed than not have tried at all, and the writer certainly should be treated with courtesy; but this does not mean that his errors or crudities should pass uncensured. Nothing is so essential to progress as severe criticism of alleged discoveries: if they are good, their merits will be made more prominent; if bad, the sooner they are put out of the way the better.

We are sorry to learn that Mr. Albert T. Whitney has resigned his position as a member of the city Board of Health. He was re-appointed last May for three years. He was remarkable for his energy and determination in the discharge of his duty. We understand that the cause of his resignation is the necessity of returning to business, his salary being insufficient. It is greatly to be regretted that the city cannot see the advantage of paying enough to secure the best men to serve in such positions. Nothing is saved by this parsimony in such matters. Mr. Whitney's resignation goes into effect on January 1st. The Hon. Henry G. Crowell is appointed his successor.

The Hospitals.

BOSTON CITY HOSPITAL.

Service of Drs. Cheever, Thorndike and Fifield.

The operations performed on Tuesday and Friday, Dec. 15th, and 18th, 1874, were as follows:—

1. Ovariotomy.
2. Paracentesis Abdominis.
3. Cyst of the Neck.
4. Vascular Excrescence of Urethra.
5. Anchylosis of the Elbow.
6. Re-adjustment of Flaps.
7. Necrosis of Frontal Bone.

4. Six years ago, this patient, a middle-aged woman, had a similar growth removed from the meatus and the surface cauterized with nitric acid. The relief was perfect for two years, when her former symptoms began to return and have gradually increased. During the past two months, the desire to empty the bladder has been almost constant and the micturition attended with much scalding. The mucous membrane of the lower two thirds of the meatus presents a bright red, vascular appearance; it is hypertrophied and slightly lobulated, and projects from between the lips of the meatus like a strawberry. The diseased surface was lightly touched with the galvano-cautery and a cold-water dressing applied. Dr. Cheever spoke of a similar case, seen by him a few years ago, in which a woman had been treated four months for supposed "disease of the womb."

These growths are made up of bloodvessels, connective tissue and thickened mucous membrane. However treated, they are very apt to return, and, though not malignant, are yet very troublesome.

The galvano-cautery, or the actual cautery, applied freely till all the diseased structure is destroyed, promises the best results of any of the proposed methods of treatment.

5. The patient is a young woman who had acute rheumatism last winter. Several joints were affected, but all recovered perfectly, except the left elbow, which is anchylosed in a nearly straight position. The adhesions were broken up last April, but have re-formed. There is a very slight motion in the joint, and the arm is free from swelling and inflammation. The patient having been etherized, the adhesions were thoroughly broken up, so that the forearm could be flexed to its normal extent.

Dr. Cheever proposes to give passive motion a fair trial, and, should anchylosis be found inevitable, to fix the forearm at a right angle, so the hand can be carried to the head.

6. Amputation of the arm was performed upon this young man several weeks ago for a railroad injury to the elbow-joint. The flaps had contracted

irregularly, so that a cutaneous and granulating surface were apposed. The flaps were dissected up, trimmed and carefully united with wire sutures.

GEO. W. GAY, M.D.

Correspondence.

AMERICAN MEDICAL ASSOCIATION.

DECEMBER 19, 1874.

MESSRS. EDITORS,—I am willing to let my letter speak for itself so far as the American Medical Association is concerned, and I should not have a word more to say upon any topic connected with the views I have already given in my letter, if in your editorial upon it you had not expressed an opinion on two points, to which I ask the privilege of replying.

1st. The apology, or whatever it may be called, made by the American Medical Association, in 1872, for the unfortunate (to use the mildest term) proceedings in Washington in 1870, was submitted to many, if not all, of the Massachusetts delegates present at Philadelphia. A sincere desire was manifested by men high in influence with the American Medical Association to heal the breach between the two societies. In its terms it was wholly satisfactory to those of us who read it, and who could have amended it before it was laid before the meeting. We really supposed, perhaps unwisely, that it was sufficient, and so told the gentleman who proposed to offer it for the consideration of the Association. The blame, therefore, is again to be laid justly on Massachusetts men, who were, unwittingly, not sufficiently jealous, perhaps, of Massachusetts honor. But no blame can be laid on the American Medical Association or its officers for shortcomings in this respect.

2d. You intimate that my simple suggestion that the power of the Councillors is only *advisory* (that is, on the matter at present under discussion) tends to create dissensions between the Councillors and the District Societies. Certainly nothing could be farther from my thought than such an intention. I simply stated a legal fact, and if I am wrong I am willing to be corrected. I stated, and I repeat the statement, that in the election of delegates to the American Medical Association the action of the Councillors is simply "*advisory*," and that the "*power to choose*" rests with the District Societies. Will you kindly correct me if I am in error, for I cannot, at present, see any flaw in that proposition? I know that the contrary opinion exists, somewhat widely diffused in the State. Your Editorial will help to confirm that opinion. I verily believe that it is radically wrong, and fraught with real dangers to the well-being of the Massachusetts Medical Society and of its District Societies.

For these reasons, I am obliged to trouble you again upon this subject, which certainly must be a much less interesting one to the majority of your readers than a discussion of some more strictly professional topic.

I remain very truly yours, HENRY I. BOWDITCH.

[As we have expressed ourselves ready to overlook the insult, it is hardly worth while to discuss the apology. We could say, however, that we learn from good authority that some of the leaders of the Association refused, in private conversation, to support any resolutions involving an acknowledgment of wrong.

There is no question whatever that *the power of the Councillors is simply advisory*, except in certain cases provided for in the By-Laws. We had no intention of giving any other impression. Dr. Bowditch's remark implied that the advice of the Council, if opposed to sending delegates, should not be taken; and we thought it right to protest against an appeal from a body, appointed to advise and capable of advising, to a larger body that has not the first and may not have the second of these attributes.—EDITORS.]

Medical Miscellany.

CORRECTION.—JAMES H. McDONELL, not Mc*Donald*, was appointed Assistant Surgeon of the Ninth Regiment, M. V. M.

ATROPIA is highly extolled by Dr. T. Lander Brunton as an antidote to poisonous mushrooms.

A HYGIENIC INSTITUTE is to be erected at Munich, to be placed under the directorship of Prof. v. Pettenkofer.

Zeno, the fatalist, whipped a slave for theft. "It is fated for me to steal," said the thief. "And to be whipped," rejoined the philosopher.

TRICHINIASIS.—In Linden, a suburb of Hanover, an extensive epidemic of trichiniasis has recently braken out, about 400 individuals having been attacked at last accounts. Of 70 cases treated at the hospital, 21 had terminated fatally. The malady was in each instance traceable to infected pork.

THE RIGHT DOCTRINE.—"One state of the mind is essential to all crime, namely, the intention to commit it. . . . . If a criminal be compelled by necessity to commit crime, so also is society compelled, by the necessity of suppressing crime, to have him punished."—DR. BUCKNILL, *Lecture*, Nov. 20, 1874.

A FIBROMYOMA OF THE FUNDUS UTERI was recently removed by Lawson Tait by the abdominal section. The tumor had been in existence for five years, growing rapidly in the preceding months, causing great distress by its pressure on the pelvic organs. The tumor, after removal, weighed eight pounds.—*British Medical Journal.*

ASPHYXIA IN CROUP.—It is a well-known fact that children not infrequently die of croup with symptoms of dyspnœa, in whom no false membrane can be detected at the *post-mortem* examination, nor any other change which would account for the phenomena of asphyxia. Niemeyer attributes the cause of death in these cases to paralysis of the infiltrated and relaxed muscles of the larynx. If false membranes are present, both in- and ex-piration are obstructed; if, however, there is paralysis of the laryngeal muscles, and especially of the crico-arytenoideus posticus, inspiration alone is interfered with.—*Niemeyer's Lehrbuch.*

ADULTERATION OF SUBNITRATE OF BISMUTH.—At the Cook County Hospital, an extensive burn of the leg was treated by dusting subnitrate of bismuth over the open surface of the wound and then covering it with dry lint. In a few days, symptoms of metallic poisoning exhibited themselves; the patient complaining of increased pain at the seat of injury and a metallic taste in the mouth. A blue line soon appeared upon the gums, and numerous small ulcers were formed upon the mucous membrane of the cheeks. Upon testing the bismuth, this substance was found to contain large quantities of lead, which was undoubtedly the cause of the metallic poisoning.—*Chicago Medical Journal*, December, 1874.

RECTO-VAGINAL FISTULA CAUSED BY A PESSARY.—At a recent meeting of the Obstetrical Society of London, Mr. Churton related the particulars of a case where a patient, aged 60, had worn a pessary for two years, by means of which a recto-vaginal fistula had been produced, large enough to admit two fingers. In the discussion which followed, Dr. Routh observed that he had seen an instance where a globular pessary was retained for five years and then removed with forceps. He had also known of two cases in which Hodge's pessaries produced fistulæ.

Dr. Wiltshire mentioned a case in which a Zwanck's pessary caused fistulous openings into both the bladder and the rectum. He regarded gouty women as very intolerant of pessaries, incrustations rapidly ensuing on them. —*British Medical Journal.*

Doctors (of Law) Disagree.—It was not, as generally supposed, of doctors of medicine that Pope wrote:—

> "Who shall decide when doctors disagree,
> And soundest casuits doubt, like you and me?"

Nor would he now, when the law, which should be fixed and certain above all things, is so unstable in the decisions of its greatest expounders. A distinguished lawyer, says the *Medical Times*, recently stated of the judges lately examined on the law of homicide, by a committee of Parliament, that "they flatly contradict each other."

Lime Glycerine for Burns.—The following preparation has been used by Lamb for several years with great success:—

℞. Oxidi calc., gram. iij.;
Glycerinæ, " cl.;
Spts. æther. chlor., gram. iij. M.

Charpie is to be dipped in the mixture and placed over the burned surface; it is then covered with a sheet of gutta percha, and then a layer of charpie is added, the whole being then enveloped in a loose bandage. The pain ceases almost instantly and the sore heals very rapidly.—*New York Medical Journal.*

Malignant Pustule produced by a Fly-bite.—The patient, a coachman, was conscious of being bitten by a fly on the 28th of March last. The puncture was inflicted in the temporal region, and a minute mark was left by it, not unlike a flea-bite, at which point some itching was experienced upon the following day. Upon the evening of the 29th, a swelling appeared in the temporal region, which extended over the entire face, becoming so intense that, upon the evening of the 30th, the eyelids could no longer be parted. April 1st, he was received into the hospital, upon which occasion the characteristic black eschar was noticed, surrounded by a coronet of vesicles. In spite of the most heroic treatment (incisions and cauterization), no decided relief was obtained, the swelling and gangrene slowly extending until the left eyelids, the soft tissues of the nose, the lips and the left ear all sloughed and became detached, imparting to the face the appearance of a hideous mask. Death finally ensued May 10th. No trace of bacteria could be detected either in the blood, nor the serum of the vesicles, and the inoculation of rabbits with the blood was followed by negative results.—*Lyon Médical*, September 13, 1874.

Mortality in Massachusetts.—*Deaths in sixteen Cities and Towns for the week ending December* 12, 1874.

Boston, 133; Worcester, 15; Lowell, 26; Milford, 2; Chelsea, 6; Cambridge, 20; Lawrence, 15; Springfield, 6; Gloucester, 2; Fitchburg, 2; Taunton, 3; Newburyport, 2; Somerville, 12; Fall River, 20; Haverhill, 3; Holyoke, 1. Total, 268.

Prevalent Diseases.—Consumption, 55; pneumonia, 30; scarlet fever, 11. No deaths reported from diphtheria.

CHAS. F. FOLSOM, M.D.
Secretary of the State Board of Health.

Deaths in Boston for the week ending Saturday, Dec. 19, 170. Males, 90; females, 80. Accident, 2; apoplexy, 5; asthma, 1; anæmia, 1; inflammation of the bowels, 2; bronchitis, 4; inflammation of the brain, 1; congestion of the brain, 2; cerebro-spinal meningitis, 1; cancer, 5; consumption, 27; convulsions, 2; croup, 8; debility, 4; diarrhœa, 2; dropsy, 1; dropsy of the brain, 5; diphtheria, 4; erysipelas, 1; scarlet fever, 7; typhoid fever, 3; gastritis, 2; disease of the heart, 7; hæmorrhage, 1; homicide, 1; intemperance, 2; disease of the kidneys, 4; laryngitis, 2; congestion of the lungs, 3; inflammation of the lungs, 18; marasmus, 11; measles, 1; old age, 9; paralysis, 4; premature birth, 2; pyemia, 1; rheumatism, 1; scalded, 1; suicide, 1; syphilis, 2; scrofula, 1; disease of the spine, 1; tetanus, 1; tonsillitis, 1; tumor, 1; whooping cough, 3; unknown, 1.

Under 5 years of age, 73; between 5 and 20 years, 14; between 20 and 40 years, 33; between 40 and 60 years, 17; over 60 years, 33. Born in the United States, 115; Ireland 39; other places, 16.